

Application no. 09/006,777
Amdt. Dated September 22, 2003
Reply to Office Action of June 20, 2003

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-22 (canceled)

Claim 23 (previously presented): A DIBOC-based ATM switch, comprising:

a plurality of input ports for receiving data units on virtual connections, each input port physically associated with a plurality of data stores and an input control for transmitting "Requests" to release data units;

a plurality of output ports, each output port operatively associated with the plurality of the data stores and physically associated with an output control for monitoring "Requests" to release data units; and

a switch fabric for switching data units for any of the input ports to any of the output ports;

wherein the data stores are arranged to buffer data units for delivery to their associated output port, and the output controls are arranged to monitor the backlog of buffered data units for delivery to their associated output ports, through information transmitted in "Requests" and, if the backlog reaches a particular level, to enforce a rate limitation against additional data units for delivery to their associated output ports, wherein the additional data units in violation of the rate limitation are filtered.

Claim 24 (original): The ATM switch according to claim 23, wherein each data store buffers data units having a distinct priority.

Claim 25 (original): The ATM switch according to claim 23, wherein each of the data units designates a priority and the additional data units which designate relatively high priorities are not in violation of the rate limitation.

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Claim 26 (original): The ATM switch according to claim 23, wherein each of the data units designates a priority and the additional data units which designate relatively low priorities are in violation of the rate limitation.

Claim 27 (original): The ATM switch according to claim 23, wherein each of the data units designates a priority and the determination of whether the additional data units which designate relatively low priorities are in violation of the rate limitation is based on a "leaky bucket" algorithm.

Claim 28 (original): The ATM switch according to claim 23, wherein if the backlog falls below the particular level, the output controls are arranged to lift the rate limitation.

Claim 29 (original): The ATM switch according to claim 23, wherein the output controls impose the rate limitation by transmitting congestion control signals to the input controls.

Claim 30 (original): The ATM switch according to claim 28, wherein the output controls lift the rate limitation by transmitting congestion control signals to the input controls.

Claim 31 (original): The ATM switch according to claim 23, wherein each of the data units designates a priority and an input port and the determination of whether the additional data units which designate relatively low priorities and a particular input port are in violation of the rate limitation is based on a "leaky bucket" algorithm.

Claim 32 (original): The ATM switch according to claim 31, wherein the particular input port is associated with a selected store whose backlog caused the rate limitation to be imposed.

Claims 33 - 54 (canceled)